

The path length from the array to the source shortens by $D \sin \theta$ as shown for movement Left to Right along the array. Received phase advances accordingly.

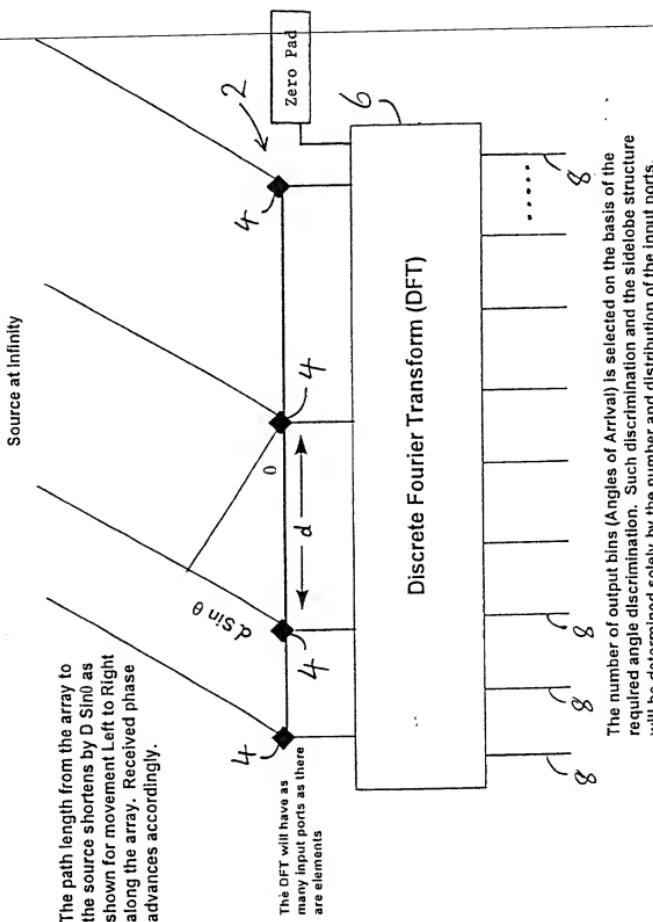


FIGURE 1

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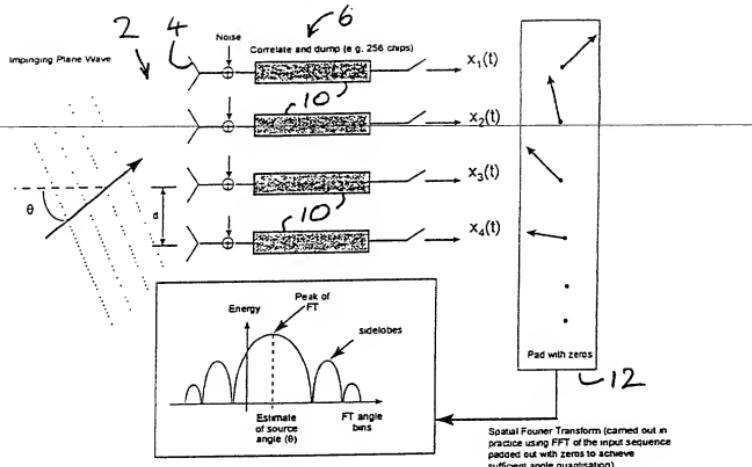


FIGURE 2

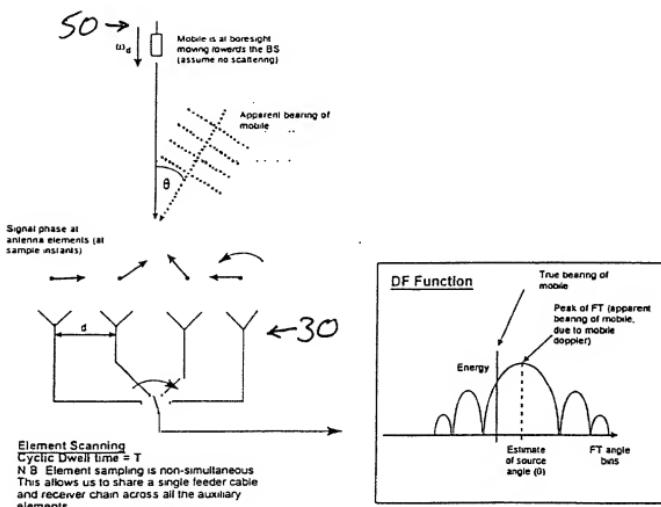


FIGURE 4

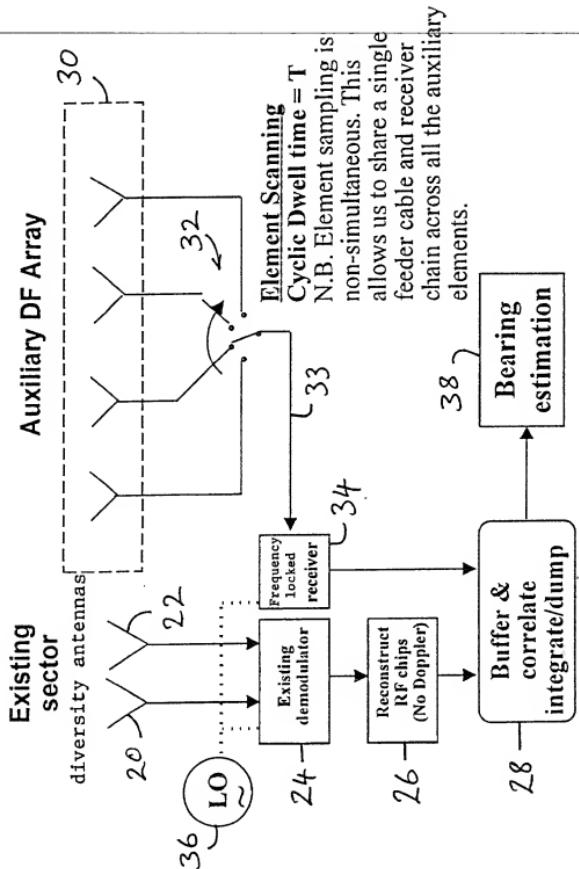
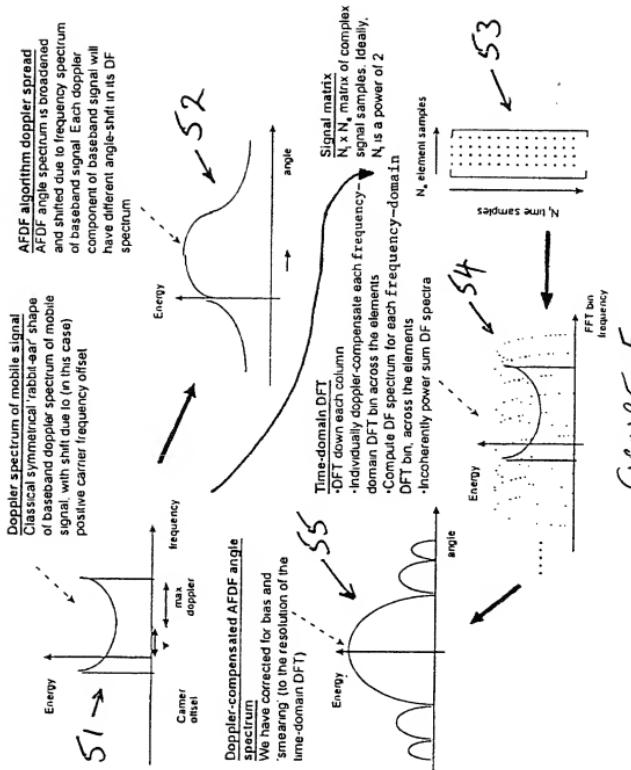


FIGURE 3

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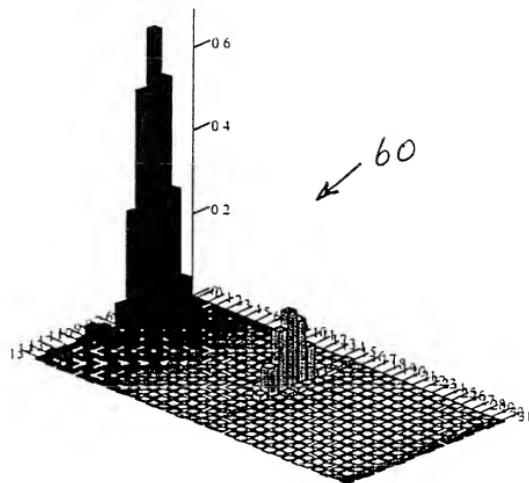
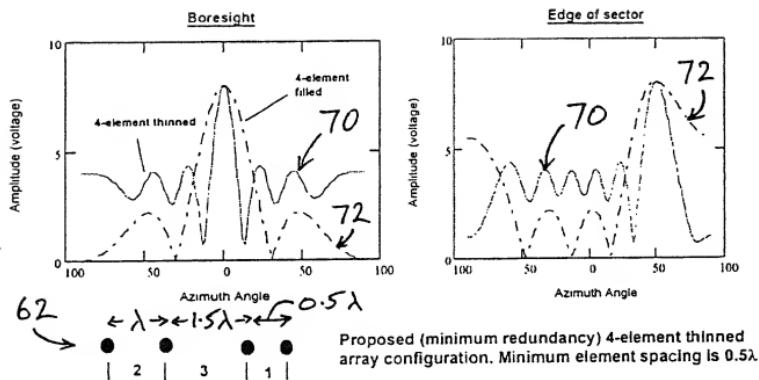


FIGURE 6



- The selected thinned array configuration biases elements towards the edge of the available aperture and achieves a -3dB beam width of 11° (N.B. Narrower beamwidth than a 7-element filled array due to the 'end-weighting').
- Peak sidelobes close to the -6dB target level are achieved even when the main beam is scanned towards the edge of the sector.

FIGURE 7

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Mobile channel characteristics in a rural environment

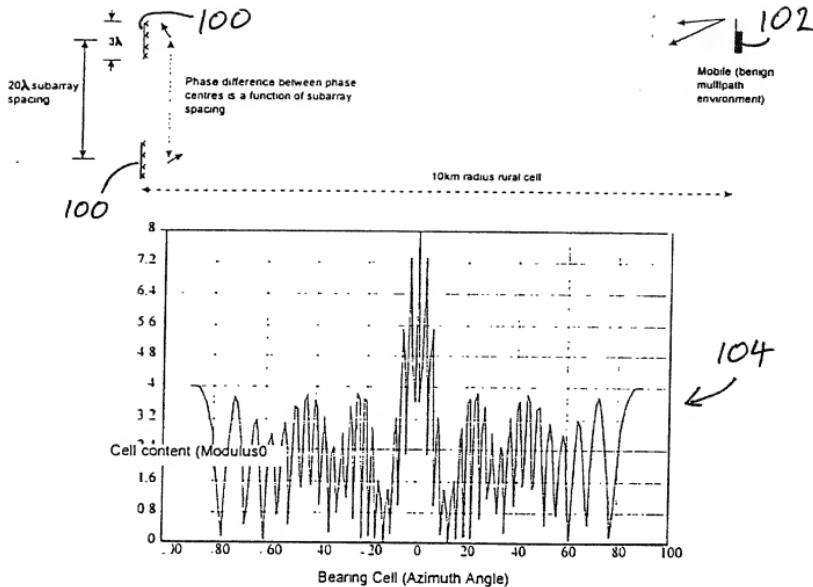


FIGURE 8

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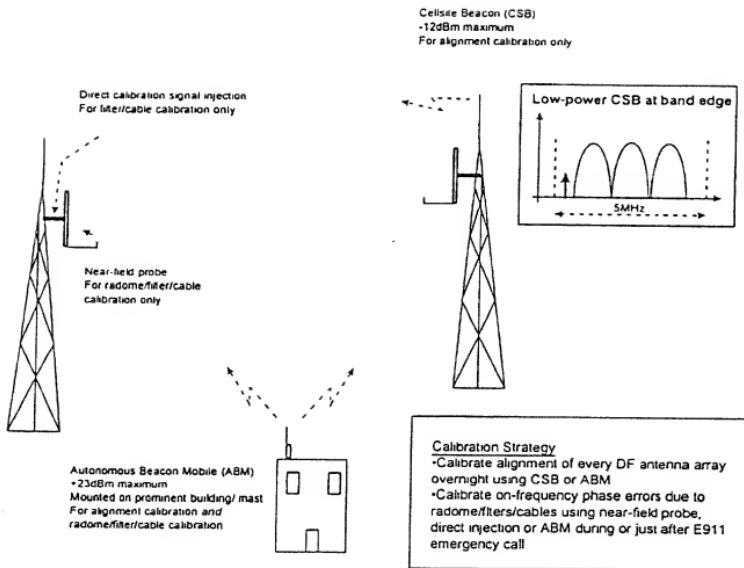


FIGURE 9

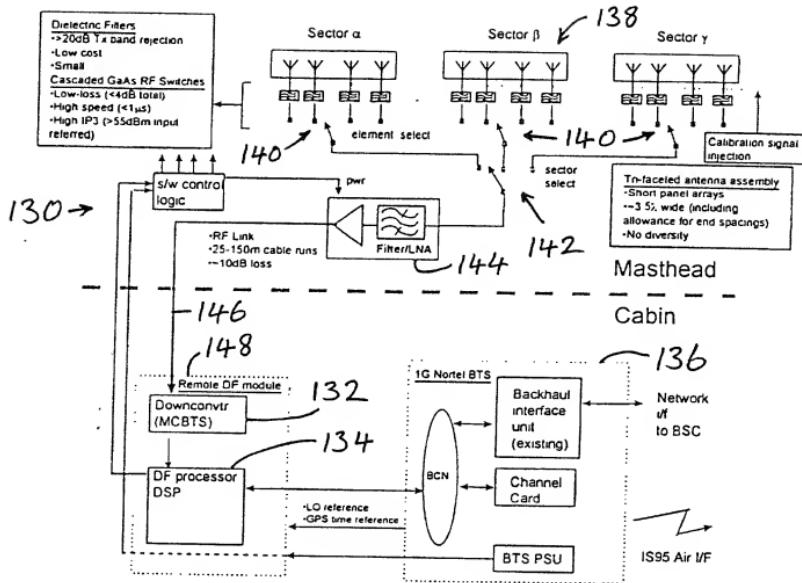


FIGURE 10

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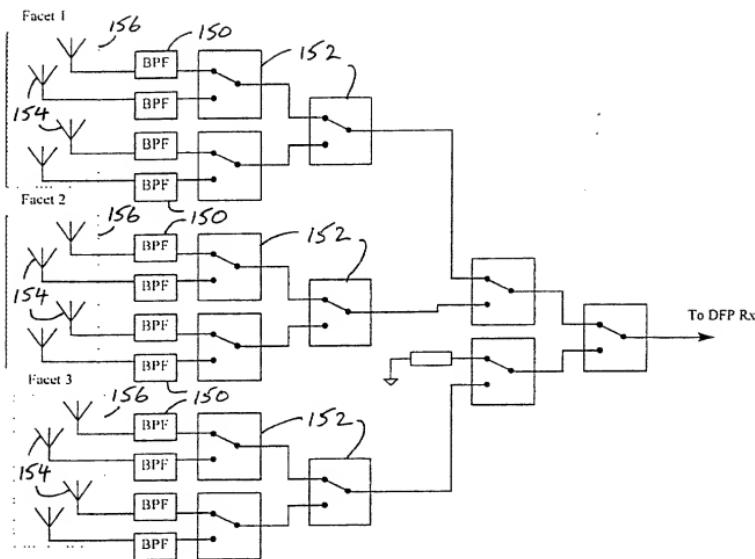


FIGURE 11